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***Trip Report for the work conducted for Feed Processing and Improved use of Crop residues***

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**Introduction**

Farmers from seven AR forage integration sites and poultry research households were involved in the training. A total of 54 (28 male and 26 female) volunteer farmers’ trainers and 6 Extension staff were trained and demonstrated feed processing, mixing and feeding of prepared feed to dairy cattle.

The attendance of farmers from all villages was very good. This indicates how well farmers are organized and willing to take part in the training and train other farmers in their respective villages

The chopping and grinding of feeds for livestock using diesel machine was the best technology preferred by many farmers during the training and machine demonstrations both in Seroto and Matufa where the training was carried. Farmers TOT in all the seven villages (Sabilo, Seloto, Long, Shaurimoyo, Matufa, Hallu and Galapo) pledged to train their fellow farmers and use the machine to process crop residues and other feeds for their livestock especially now where there are plenty of crop residues.

**The expected outcome from the training conducted to volunteer farmers trainers:**

1. Farmers has started processing and feeding dairy cows on Crop residues based rations. Twelve (12) farms from two villages of Hallu and Gallapo participated in on-farm trials. The crop residue based rations are developed based on the available crop residue and the capacity of the dairy cow production (Milk production).
2. Farmers TOT has been trained to record data on the number of beneficiaries for processing machine, size of feeds to be processed, the fuel to be used in processing feeds, distance covered by a farmers who wants to process and amount of animals the farmer intends to feed the processed crop residue ration

**The approach to the study**

This activity involved meeting with farmers to introduce the study and select farmers (TOT) which were to be trained on feed processing and use of crop residues:-

**Criteria used for selecting farmers**

* A farmers should have a well-constructed cattle shed, and should have a milking dairy cows which are fed in a well-constructed feed trough.
* The host farms should have a person who is responsible for processing livestock feed, feeding and watering the dairy cattle.
* There should be enough crop residues (e.g, maize stover, bean haulms) to feed dairy cattle.
* A farmer should be ready to train other farmers or group of farmers in the village

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| **Caption 1:** Cattle fed on a well-constructed troughs | Description: C:\Users\dngunga\Desktop\crp BBT\IMG_20160324_125521.jpg  Caption 2: Crop residues stored in well-constructed structure |

The summary of different activities performed are shown in the table below:

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| **Task** | **Deliverable** |
| 1. Select farmers (farms) that will host the trial. Host farms required to have well constructed shed, feed troughs, Crop residues and store for storing crop residues | * Developed data collection tools (questionnaire) and collected data * Collected crop residues samples for quality analysis * Produced a report |
| 1. Trained extension staff and farmers on livestock feed processing (chopping/milling) of crop residues, feeding and data recording | * 2 extension staff and 54 (28 M and 26 F) farmers trained on livestock processing, feeding and data recoding. |
| 1. Data recording from the two host farms. | * Data on feed intake, feed wastage, time taken to process livestock feed and feeding, labor, milk production per day, fuel consumption was recorded before and after initiation of the machine. |
| 1. Data obtained created in an excel shit for further analysis | * Data collected is being analysed for documentation |

**Way forward**

* Farmers to give feedback on how they want the machines to be used at village level to benefit all farmers
* Trained farmer trainers and extension staff to agree and decided that to train their fellow farmers at village level.
* Collect perception data at the village level after farmers have been trained
* Liaise with BrazAgric on how to make the machines available for purchase at an affordable price and if they need any modifications.
* Formulate complete rations for livestock and Poultry for farmers to start feeding their animals

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| Description: C:\Users\dngunga\Desktop\BBT PICTURES\Camera\IMG_20160502_105007.jpg  Caption 5: Farmers introduced on the study on livestock feed processing machine Seloto village | Description: C:\Users\dngunga\Desktop\crp BBT\IMG-20160520-WA0027.jpg  Caption 6: Measurement of crop residues before processing by the machine |
| Description: C:\Users\dngunga\Desktop\crp BBT\IMG-20160520-WA0028.jpg  Caption 7: Processed crop residues stored | Description: C:\Users\dngunga\Desktop\crp BBT\IMG-20160520-WA0050.jpg  Caption 8: Unprocessed crop residues tramped by cattle |

**Conclusion**

The training went well and farmers showed a lot of enthusiasm and interest in the technology. Farmers are willing to form functional groups that are easy entry points to introduce technologies and scaling.